

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

P. 1 of 3

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.	JOB ORDER NUMBER	APPROP. FY
QSS Group, Inc.	NAS5- 99124 TASK NO. 244 AMENDMENT	480-615-31-69-89	2000

TASK TITLE: (NTE 80 characters; include Project name)

POES Search and Rescue Services

APPROVALS: (Type or print name and sign)

ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR)

David Affens <i>David W. Affens</i>	DATE 3/22/00	ORG CODE 567	MAIL CODE 480	PHONE 301-286-9839
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BRANCH HEAD Dorothy Tiffany <i>Karen Halterman</i>	DATE 3/23/00	CODE 480	PHONE 301-286-7742
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CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) Robert S. Lebair, Jr. <i>Robert S. Lebair</i>	DATE 3/30/00	CODE 560	PHONE 301-286-6588
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FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE?

(If YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)

☒ NO ☐ YES

CONTRACTING OFFICER'S QUALITY REP.

DESIGNATED FAM:

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reps and Certs.

(To be completed by Contracting Officer)

C.O. Requested Quote on:

Date:

Contractor will develop specification or statement of work under this task for a future procurement. ☒ NO ☐ YES

Flight hardware will be shipped to GSFC for testing prior to final delivery. ☐ NO ☐ YES ☒ N/A

Government Furnished Property/Facilities: ☐ NO ☒ YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only)

Onsite Performance: ☐ NO ☒ YES If yes: ☒ TOTAL ☐ PARTIAL

If partial, indicate onsite work in SOW by asterisk (*)

Surveillance Plan Attached: ☒ NO ☐ YES

Highlighted Contract Clauses: (to be completed by Contracting Officer)

Per Clause H.14, Task Ordering Procedure, subparagraph (f), the effective date of this task order shall be May 1, 2000.

INCENTIVE FEE STRUCTURE (check one)

(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)

	<input checked="" type="checkbox"/> No. 1	No. 2	No. 3	No. 4	No. 5
Cost	10%	50%	25%	25%	%
Schedule	15%	25%	25%	50%	%
Technical	75%	25%	50%	25%	%

(To be completed by Contracting Officer)

The target cost of this task order is \$ 394,935.

The target fee of this task order is \$ 24,905.

The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 419,840.

The maximum fee is \$ 36,399.

The minimum fee is \$0.

AUTHORIZED SIGNATURE:

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

Elizabeth J. Austin
SIGNATURE OF CONTRACTING OFFICER

5/2/00
DATE

ELIZABETH J. AUSTIN
CONTRACTING OFFICER

TYPED NAME OF CONTRACTING OFFICER

CONTRACTOR'S ACCEPTANCE:

AUTHORIZED SIGNATURE

DATE

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.	TASK NO.	AMENDMENT
QSS Group, Inc.	NAS5- 99124	244	

Applicable paragraphs from contract Statement of Work: 2B

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

(This is a follow-on to Task 60 under this contract; uninterrupted transition is required.)

The contractor shall provide experienced systems engineering and technician services to the NASA Search and Rescue Rescue Mission at GSFC. These services shall include maintenance and operation of the Systems Evaluation and Laboratory (SEDL) which is a ground station test system used to qualify newly launched spacecraft subsystems and perform specialized testing in support of NOAA's operation of the Cospas-Sarsat system. In addition, the contractor shall provide technical research and development services to evaluate the operational feasibility of using airborne and spaceborne synthetic aperture radar and other technology to develop beaconless search and rescue systems capable of locating sinking ships and downed aircraft.

Maintain proper operation of Beacon Simulator Signal Generator and provide support for T-4 test scenarios.

Assure that system design of SARSAT flight segment is compatible with performance requirements for the launch vehicle and the ground segment and verify that reliability objectives are satisfied.

Review and approve major SARSAT system level functional performance requirements.

Compare predicted and actual performance of the SARR and SARP instruments aboard spacecraft.

Implement hardware and software to support SEDL antenna control using PC hardware.

Maintain proper operation of Beacon Simulator Signal Generator and provide support for T-4 test scenarios.

Continue feasibility study of transition of HP-1000 and associated systems to a PC based system.

Process and analyze synthetic aperture radar imagery from multipolarization, multifrequency, multisensor platforms.

Continue development and evaluation automatic target detection techniques applied to radar imagery.

Continue interferometric processing to generate high resolution digital terrain elevation maps.

Continue design and develop software for real-time data processing and georectification.

Participate in planning and execution of Search and Rescue field experiments.

Participate in relevant technical meetings and reviews.

PERFORMANCE SPECIFICATIONS:

Bi-monthly status reports to include problems/issues/successes related to required work.

Examples of deliverables and requirements contained in the SOW will be provided to the contractor.

APPLICABLE DOCUMENTS:

National Search and Rescue Plan.

TASK END DATE: 4/30/01

MILESTONES/DELIVERABLES AND DATES:

See Page 3.

PERFORMANCE STANDARDS:

Schedule: On-time delivery/completion of the above deliverables/milestones

Technical: ATR's acceptance of the above

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

David Affens, building 6, room W206

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Applicable paragraphs from contract Statement of Work: 2B

MILESTONES/DELIVERABLES AND DATES:

4/30/00 Complete writing three technical papers for the upcoming SPIE Aerosense Conference in April 2000

5/16/00 Perform T-4 testing (beacon processing capacity)

5/30/00 Develop replacement BSSG specifications

6/30/00 Complete the first stage of upgrading the Search and Rescue Data Processing Software (SARDPS)

6/30/00 Provide services for Pathfinder Technology Development contract

7/31/00 Complete plan for search and rescue radar field experiment

7/31/00 Perform T-7 testing (impact of updating encoded position data)

8/31/00 Improve polarimetric-based automatic crash site detection techniques

9/30/00 Perform T-1 test

10/31/00 Perform post launch in orbit testing of NOAA-16 subsystems (launch scheduled in August 2000)

10/31/00 Improve relative motion compensation, complex data compression, and super-resolution algorithms

11/30/00 Perform T-11 testing (GEOSAT configuration WB / NB: AGC on/off)

12/31/00 Process and analyze data from planned search and rescue experiment

2/28/01 Support two GEOSAR Interface Mitigation Technique validation tests

4/30/01 Perform LEOSAR tests

4/30/01 Develop automated tests as listed in Annex B of C/S T.004

4/30/01 Develop additional tests as defined in NASA post launch test plan (dated August 1992)

Process, analyze data, and provide report from SAR field experiment: 2 weeks after completion of experiment

Perform T.005 Annex D - Beacon Simulator Tests Scripts as required